Empire of the Air: The Men Who Made Radio. KEN BURNS, MORGAN WESSON, TOM LEWIS, producers; GEOFFREY C. WARD, writer; KEN BURNS, director. Based on the book *Empire of the Air* by Tom Lewis, HarperCollins Publishers, 1991. General Moters Corporation, The National Endowment for the Humanities, and The Corporation for Public Broadcasting, funders. Florentine Films and WETA-TV, 120 minutes, 1991.

Ken Burns's latest historical documentary, *Empire of the Air*, tells the story of three men involved in American broadcasting—Lee deForest, Edwin Howard Armstrong, and David Sarnoff. Through the intertwined lives of two inventors and a businessman, *Empire of the Air* aims to explain how radio began and grew. The film is based on the book of the same title by Tom Lewis, an English professor at Skidmore College, but viewers aren't told how the collaboration between author and filmmaker came about or worked. The film, while imaginatively and carefully scripted and researched, runs into trouble because it never explains the technology involved in radio broadcasting, fails to analyze the stories it tells, and ultimately depends on a flawed vision of history.

The film features wonderful visuals, both still pictures and movies, of people using radios and of the men whose lives it explores. First-rate music, narration (delivered by Jason Robards), and additional audio make the film an attractive package. Clever visual touches give evidence of careful thought: recordings of broadcasts playing while viewers see a black screen remind us of what it was like to be a radio listener, while old technologies (such as spark gap transmitters and glowing vacuum tubes)

2. To provide historical context for a discussion of the film, I recommend, in addition to Aronowitz's essay, Thomas Geoghegan, *Which Side Are You On? Trying to Be for Labor When It's Flat on Its Back* (New York: Penguin Books USA, 1992), and Peter Rachleff, *Hard-Pressed in the Heartland: The Hormel Strike and the Future of the American Labor Movement* (forthcoming, South End Press, Fall 1992).

provide transitional images. The opening section of part 2 describes the beginning of radio broadcasting and how radio entered American lives, both more interesting than the biographies of the "men who made radio" which fill the rest of the two hours.

The film focuses on two important inventors but misses the chance to use visual images (diagrams? the original machines disassembled?) to help viewers understand the technology of radio broadcasting. The old technologies, which add visual interest, are never contextualized or explained.

The script recounts the inventive and business triumphs, patent battles, war service, and marriages of deForest, Armstrong, and Sarnoff but should have asked more and harder questions about the men it profiles. What did it mean for deForest's and Armstrong's work, and for the patent litigation in which they engaged, that they saw themselves as "heroic inventors"? What was the relationship between the technologies they developed and the programs heard over the radio? What impact did the business organization devised by David Sarnoff have on radio programming and on technological innovation? Did his business strategies reflect his immigrant background? The film describes the individual lives but rarely ventures any analysis. In addition, despite the film's insistence that the lives of these three men were "as improbable as any radio drama," it was difficult to remain interested in such unlikable characters.

Finally, focusing on three men as those "most responsible" for radio's "astonishing success" leaves out too much. The authors (of the film and the book) have taken a discredited historical approach by telling the story of social and cultural changes in terms of the White men who seemingly instituted or controlled them. Many historians struggle to present to the public complicated narratives about the impact of events on ordinary lives and the impact of everyday lives on historical change. In order to hold the public interest, *Empire of the Air* tells the personal stories of "fascinating" individuals "responsible" for institutions—a form of *People* magazine history. Rather than focusing on the trials and tribulations of two inventors and a wealthy businessman, a film of this caliber could have addressed more important questions about the role of the inventor and businessman in the introduction of new technologies and the role of broadcasting in American life.

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